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REPORT DOCUMENTATION	READ INSTRUCTIONS BEFORE COMPLETING FORM	
I. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TiTLE (and Subtitle)		5. TYPE OF REPORT & PERIOD COVERED
THE HIGH SCHOOL GRADUATE, AN INDIC	Final Report 9 June 78	
A QUALITY MARINE?	,	6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(a)		8. CONTRACT OR GRANT NUMBER(#)
Cheatham, Charles W., Maj, USMC		. ,
D. PERFORMING ORGANIZATION NAME AND ADDRESS Student at the U.S. Army Command College, Fort Leavenworth, Kansas	and General Staff	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
1. CONTROLLING OFFICE NAME AND ADDRESS		12. REPORT DATE
US Army Command and General Staff	College	9 June 78
ATTN: ATSW-SE		13. NUMBER OF PAGES 68
4. MONITORING AGENCY NAME & ADDRESS(If dillere	nt Iram Controlling Office)	15. SECURITY CLASS, (of this report)
		Unclassified
		15a. DECLASSIFICATION/DOWNGRADING

Approved for public release; distribution unlimited.

17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, If different from Report)

Approved for public release; distribution unlimited.

18. SUPPLEMENTARY NOTES

Master of Military Art and Science (MMAS) Thesis prepared at CGSC in partial fulfillment of the Masters Program requirements, U.S. Army Command and General Staff College, Fort Leavenworth, Kansas 66027

19. KEY WORDS (Continue on reverse side if necessary and identify by block number)

Marine Corps Quality Enlistees, Quality Personnel, High School Graduates

20. ABSTRACT (Continue on reverse side if measuresty and identify by block number)

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The study concludes that the high school graduate is a quality indicator for enlistment and that the best candidate for enlistment in the Marine Corps is the high school graduate who enlists at an early age.

SECURITY CLASSIFICATION OF THIS PAGE(When Date Entered)

The High School Graduate, An Indicator Of A Quality Marine?

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Final reports June 1978

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Approved for public release; distribution unlimited.

A Master of Military Art and Science thesis presented to the faculty of the U.S. Army Command and General Staff College, Fort Leavenworth, Kansas 66027

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# MASTER OF MILITARY ART AND SCIENCE THESIS APPROVAL PAGE

1.	Name of candidate CHARLES W. CHEATHAM, MAJ, USMC
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Qua	lity Marine?
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4.	Accepted this 24 day of May 1978
Din	ector. Master of Military Art and Science

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#### ABSTRACT

This study examines the value of the high school graduate as a quality indicator for identifying young men for enlistment in the Armed Forces. The primary interest of the study is directed toward the young men who would be able to successfully complete their first enlistment in the Marine Corps and the effect a high school diploma has on their success.

The study investigates the effects of a high school education as it pertains to abnormal attrition, disciplinary problems, and job performance in the military. Comparisons are made between servicemen with high school diplomas and enlistees who are less educated at the time of their enlistments.

The study found that the best indicator of quality among servicemen was the completion of high school prior to enlistment. High school graduates were found to have lower attrition than recruits of other educational categories; however, age was a determining factor for all categories. The recruits who were of the minimum age for enlistment, 17 years old; and the older men, 21 years or older, had higher attrition rates.

The high school graduate was involved in fewer disciplinary problems than the non-high school graduate within the Marine Corps. As the percentage of high school graduates rose, the rate of disciplinary problems decreased. The mental aptitude of individuals was determined as having little effect on the disciplinary problems in the Armed Forces.

Individuals who had completed high school were found to be more productive and trainable than other servicemen. The high school graduate

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had a higher completion rate at formal schools and their performance was recognized by promotions more often than the non-high school graduate.

Special recognition for exceptional performance was meritorious promotion. The individual who had completed high school was more frequently meritoriously promoted.

The study concludes that the high school graduate is a quality indicutor for enlistment and that the best candidate for enlistment in the Marine Corps is the high school graduate who enlists at an early age. The study suggests an enlistment contract that would benefit the Marine Corps by insuring the highest quality personnel remain on active duty. The reserve forces would benefit from this new procedure because the trained personnel who elected not to remain on active duty would be required to join the active reserves.

#### **ACKNOWLEDGEMENTS**

I wish to express my gratitude to Colonel D. K. Cliff for his guidance, special interest, and assistance in the preparation of this study.

A special note of appreciation is extended to Bonnie. Her patience and understanding contributed immeasurably to the accomplishment of this paper.

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#### CHAPTER 1

#### INTRODUCTION TO PROBLEM

#### Background

In the early 1960's the Marine Corps became concerned about the quality of the young men who were enlisting in the service. This interest has intensified over the past decade, especially during the implementation of the All-Volunteer Force concept. Personnel problems were expressed in areas of growing abnormal attrition rates, increasing disciplinary problems, and generally poor job performance. The atmosphere that was created by these adverse conditions caused good productive flarines to exit the service. An environment that was not conducive to persuading good men to remain in the Marine Corps and the difficulty that recruiters were having enlisting a sufficient number of qualified young men to meet the services' manpower needs added to the seriousness of the quality of the people who comprised the majority of the Marine Corps.

These problems were compounded in the 1970's with the advent of the All-Volunteer Force concept and the need to meet the demanding man-power requirements. The Marine Corps has always been recognized as a volunteer organization and has relied on volunteers to supply its personnel needs. On occasion the volunteers were augmented with young men who had been drafted. This reliance on the draft occurred during a time of national emergency when the Marines' recruiting forces were temporarily unable to meet their increased goals because of the vast numbers of people needed at a specific time. The draft served as a means of

Marine Corps' volunteer recruiting effort by allowing young men of draft age the opportunity to enlist in the Marine Corps rather than to be drafted into the Army; therefore, many of the Marine enlistees were not true volunteers but were draft motivated recruits. Once the All-Volunteer Force concent was instituted, the Marine Corps and especially its recruiters became acutely aware of the draft motivated enlistees. Recruiters were no longer able to select the most qualified enlistee from several applications in order to obtain his quota of new recruits; now, the recruiter was required to search diligently for minimally qualified personnel, at best, to meet their increasing quotas. The recruitment of increasing numbers of marginally capable people added to the decreasing personnel quality within the Marine Corps and made it imperative that action must be taken to reduce this type of personnel input and to begin a program to improve the standards of enlistment.

With pressure from the Congress to reduce the climbing abnormal attrition rates and internal desires to improve the quality of men enlisting, the Marine Corps began to analyze its quality standards for enlistment. The initial reaction was to increase the mental standards for entry. This suggestion would require recruiters to seek young me, higher mental abilities and reduce the number of people who were being recruited and were within the mental group IV category. Implementation of this policy did not provide the Marine Corps with an adequate solution to the personnel problem. There was yet another factor that needed to be recognized and implemented in order to improve upon the overall quality of young recruits. Since many studies had been conducted to determine the effects of education and presented the high school graduate favorably.

the flarine Corps established a policy of recruiting more graduates. The emphasis directed toward primarily recruiting from this section of society became paramount. As a result, attrition rates began to decline as did the disciplinary problems. The key to successfully eliminating some of the personnel problems appeared to be the educational level of recruits entering the service.

The Marine Corps is convinced that the possession of a high school diploma is an important indicator for identifying those individuals who will successfully serve as Marines. The success of these people has been so good that the Marine Corps presently has a policy that requires 75% of the young enlisted to be high school graduates.

This paper investigates the high school graduate as an indicator of quality for the Marine Corps.

### Statement of the Problem

To determine if the possession of a high school education upon enlistment is an indication of the quality of an individual and his abilities to cope with and adapt to Marine Corps life.

## <u>Objective</u>

The objective of this study is to determine the effects that the higher educated recruit has had on the Marine Corps. Specific areas that the paper addresses are: the reduction of abnormal attrition, disciplinary problems, and the increase in job productivity and abilities to assimilate training. Emphasis will be directed toward determining whether or not the high school graduate is the best indicator for obtaining a higher quality of recruits and, if so, if the benefits to be derived from this indicator are of sufficient value to warrant the additional effort and expense to obtain them.

Approach

Chapter I states the problem, establishes objectives, and explains the scope of the study. Chapter 2 provides a historical perspective of the Armed Forces' and the Marine Corps' concern for the quality of their personnel and the dilemmas that have been experienced in the past three decades that have had an impact on this interest. Data that presents the effects of preenlistment education on the serviceman's ability to successfully complete his first enlistment is presented in Chapter 3. A conclusion is drawn in Chapter 4, and a suggestion is presented that could enhance the overall quality of Marine Corps manpower quality when considered with current enlistment standards.

#### Scope and Methodology

Data are collected by means of historical research techniques. Resources are limited to reports, studies, and information readily available at the U.S. Army Command and General Staff College and Headquarters, U.S. Marine Corps. The study is limited in scope to the presentation of data as they apply to the education of enlistees in three general areas: abnormal attrition, disciplinary problems, and job performance. Motivation is not addressed because of the subject's complexity and the nonavailability of ample resources and a means of measuring them. Leadership is another important area that affects individual quality that is not discussed because of the variation and degrees of leadership an individual may experience. Other factors that have an effect on the quality of an individual, but not posed, are family developments and geographic backgrounds. These areas are considered to be complex and of sufficient magnitude to warrant a separate study. The study will, furthermore, be limited to male servicemen who are on their first enlistment in the Armed Forces.

#### Assumptions

For the purpose of this study, all students, regardless of the high school attended, received equal opportunities to achieve the same academic experiences regardless of the geographic region in which they may have lived. It will be assumed that all high school graduates have completed similar requirements for their diploma, primarily attending high school full time until completion. Individuals who obtained their General Equivalency Diploma (GED) will be considered as non-high school graduates except when specified differently. The assumption that all recruits receive the same quality of leadership while undergoing training will prevail throughout this paper. While servicemen are located at various bases and installations around the world, it will be assumed that this has no bearing on the paper even though some locations are more desirable than others. A similar assumption will apply to the mission of various units and the effect these units have on individuals. Unit mission will not affect the data presented in the study.

# Importance of the Study

The Marine Corps has always been very quality minded. The specific interest in quality personnel is illustrated by the experiences encountered throughout the past decade to eliminate personnel turmoil and meet the challenges inherent with the All-Volunteer Force concept. While there are many indices that apply to quality personnel, possession of a high school diploma was ranked among the most important quality indicators for selecting young men for enlistment into the Armed Forces. The high school graduate is generally accepted within the Marine Corps and society as being a better candidate for success than a non-graduate. This paper will attempt to determine if this fact is true or if the assumption is

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that the more education a person has the more successful he will be.

Also, the study will provide some insight into how the graduate and non-graduate affect the previously mentioned problem areas. Information of this nature is important and very necessary for recruiters to understand fully why they must spend their efforts attempting to enlist high school graduates when the non-graduate is more accessible. The recruiter and other Marines must also be aware of the effects that higher quality personnel have had on the Marine Corps and this data must be presented in a manner that can be understood. Marines must understand what constitutes quality within the young recruits and what is necessary to attract these young men in a manner that will create a desire to become a member of the Marine Corps. There must be no question about what is a quality indicator, and the quality must be applied to its fullest among as many as possible in order for the Marine Corps to maintain its high state of readiness.

#### **FOOTNOTES**

- 1. Bernard E. Trainor, "The Personnel Campaign Issue Is No Longer In Doubt," Marine Corps Gazette, January 1978, p. 25.
  - 2. Trainor, p. 24.
- 3. Louis H. Wilson, "CMC Reports to Congress: 'We Are Ready Spirit Is High'," Marine Corps Gazette, April 1977, pp. 22-23.
  - 4. Trainor, p. 23.
- 5. Anne Hoiberg and Newell H. Berry, "There's No Doubt About It, A Diploma Goes Λ Long Way For Combat Efficiency," Marine Corps Gazette, September 1977, p. 58.
- 6. Samuel Jaskilka, "Quality and Leadership," Marine Corps Gazette, January 1975, p. 14.

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#### CHAPTER 2

#### A HISTORICAL PERSPECTIVE

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Civilian and military organizations have been and continue to be interested in the quality of personnel they employ. Institutions will view quality differently and establish quality standards with respect to their expressed needs. These standards are based both on the requirements of the organization and the availability of personnel in the manpower market. As a result of the manpower needs and the number of people who are available to meet those needs, the quality standards of the activity may fluctuate from time to time. The Armed Forces are no different from their civilian counterparts in that they also are interested in obtaining the highest qualified enlisted personnel available within the manpower market. The services have instituted standards of quality for enlistment that fall into three major categories: physical, moral, and mental. These standards have been in existence for decades and, although more refined than previously, they are in effect today.

The physical and moral criteria normally were kept stable with respect to the desires of the services; however, this was not true with regard to the minimum mental requirements for enlistment. It was not until the Selective Service Act of 1948, that written minimum mental standards for the services were established. While these norms have eliminated the possibility of many people entering the military, it did allow the Armed Services the opportunity to enlist recruits from the available market who would best serve the military. The process of

establishing controls and standards continues to be an issue that concerns the military leaders today as they seek means of improving quality.

The military varied the standards of quality for enlisted personnel over the past three decades to meet its manpower needs. The variations in the quality of newly enlisted servicemen were reflected in changes in mental aptitude requirements of the recruits, not in any substantial difference in physical or moral traits. The ability of the military to attract sufficient numbers of men who met the minimum mental requirements had a major impact on the degree of change that took place with regard to that standard. During the late 1950's, the services directed their attention to a growing need for higher mental ability among enlisted personnel and identified four areas for increased quality: knowledge of modern military technology, less costly training, reduced disciplinary problems, and the staffing of noncommissioned officer positions with qualified personnel. 4

The future modern battlefields and the weapons systems to be employed on them are becoming increasingly sophisticated, and the attendant advanced technology requires an increasing number of highly skilled technicians and operators. Personnel are needed to operate computers, repair aircraft, and, more importantly, exercise initiative quickly in a time of crisis. Training costs are reduced by higher quality recruits who are more readily able to absorb technical instruction. Attrition rates at formal service schools are also reduced as the quality of the students increases. Statistics clearly show that recruits of lower educational levels are more likely to become involved in serious disciplinary problems which require additional administrative costs and attention to maintain good order and discipline. The fourth area that the services agree upon

is the necessity for adequate staffing of noncommissioned officer positions with people who could best do the job. The higher quality servicemen have proven themselves to be more likely to receive promotions, whereas the lower quality personnel do not normally receive as many promotions. This leaves reduced numbers of enlisted personnel eligible for reenlistment, since those who are not promotable generally do not reenlist. The services believe it is essential that personnel of adequate quality in sufficient numbers be the noncommissioned officers of the future.

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The level of mental aptitude among enlistees is determined by a written examination which is administered to everyone who desires to enter the Armed Services. The first common enlistment exam to determine aptitude was called the Armed Forces Qualifications Test (AFQT). In recent years, the AFQT has been replaced by a new evaluator, the Armed Services Vocational Aptitude Battery (ASVAB) which is similar in principle to the standard "IQ" test. All services have adopted the ASVAB as a method of determining the mental level of prospective enlistees. The mental levels are determined by the percentile scores achieved on the entrance test. The relationship of mental group to percentile score is presented below:

Mental Group	Percentile Score
I	93-100
II	65-92
IIIA	50-64
IIIB	31-49
IVA	21-30
IVB	16-20
IVC	10-15
V	0-9

While all of the services' applicants are administered the ASVAB, each service establishes minimum mental qualifications for its enlistees.

The Armed Forces were increasing the minimum requirements for enlistment when elements of Congress began advocating an all volunteer force. In 1964, members of Congress argued that the draft could be replaced with a "volunteer force." As a result of the interest of Congress, the Department of Defense began studies to determine the feasibility of replacing conscription. At the same time, the President and the House Armed Services Committee were also concerned with this subject. The President's Marshall Commission and the Clark Commission launched by the House Armed Services Committee released their findings which supported an all-volunteer force concept. Their studies resulted in congressional debate that, for the time being, ignored their findings; the draft law was renewed in 1967. Other studies, including the Gates Commission, were conducted later to determine if the nation's population could be expected to provide adequate numbers of people to support an all-volunteer concept.

"我是我们的一个人,我们就是我们的一个人,我们就是一个人,我们就是一个人,我们也不会会会会了。" "我们就是我们的一个人,我们也是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们就是我们的一个人,我们

While the studies addressed different areas relative to the nation's ability to accept and support a "volunteer force," they all expressed a common concern for the quality of the recruit that would be acquired. Opponents of the all-volunteer force concept held that more people of lower mental aptitudes would enlist than would be desirable for the services. The services were particularly concerned about the possibility of being required to accept the lower qualified mental group IV personnel to meet their manpower needs during a no-draft environment.

This concern took place during a period when the services were trying to reduce the need to accept lower quality enlistments, thereby increasing overall quality of the forces.

The interest in attracting high quality people continues with the implementation of the all-volunteer force concept; however, the services are identifying other factors that could contribute to an individual's desirability as a member of the military while affording the services a sufficient supply of personnel to meet the manpower demands.

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The Marine Corps' role parallels closely the history of the other branches of the Armed Forces with respect to the difficulties of recruiting quality personnel. Like the other services, the Marine Corps is and has always been concerned with the quality of the men enlisted. An example of the early concern is contained in the following illustration written in 1953, at Headquarters, U.S. Marine Corps:

The mental quality of the incoming recruit population is of concern to the Marine Corps because the lower the quality, the greater the proportion of men received who will be slow to learn, difficult to train, and hard to utilize effectively. Within limits, a certain number of the lower mental levels can be assimilated with no great difficulty. The problem, however, increases in seriousness as the proportion of men of limited mental capacity increases and as the concentration of them in certain units or fields becomes more intense.

Initial concern for quality was directed toward mental levels as indicated in the above statement. The Marine Corps, like the other services, opposed any program that suggested enlisting personnel of lower mental levels in large numbers and sought means of attracting people of higher mental ability. Because of their concern for attracting quality personnel, Marine officials continued to seek means of obtaining more information about personnel quality. In 1960, the Neuropsychiatric Research Unit (later named the Naval Research Center) began conducting research for the Marine Corps to determine ways of best identifying quality requirements, and continued research throughout the 1960's and 1970's, studying various individual quality characteristics. Analysis

continues by the Department of Defense and civilian agencies in an attempt to identify quality traits and to determine what characteristics an individual should possess in order to be successful in the military.

The concern of what constitutes "quality" in military personnel began to take on new dimensions in the 1960's. Instead of using the mental level as the sole determinant of mental quality, other traits were being researched in an effort to predict performance. A long recognized indicator of quality in a person is the level of schooling achieved with emphasis upon the completion of high school. The interest in those people who had earned the high school diploma suggested a need to identify the common characteristics of the group. Data were obtained in the areas of discipline, abnormal attrition, and job performance that began to present the high school graduate as a superior candidate for enlistment in the Armed Forces.

The reality of the all-volunteer force concept caused serious doubt about the services' ability to attract a sufficient number of high school graduates as well as people of the higher mental groups to satisfy the manpower needs. Marine officials favored retaining a method of determining mental aptitude as the sole means of establishing quality control of the manpower. These officials rationalized that the variances in the educational systems of the nation could not allow the high school diploma to be used as a means of measuring intelligence. The high school diplomas awarded by many schools were considered to be merely attendance certificates since the students who received them were academically ill-prepared. They did not possess the knowledge commonly associated with a high school education. The Marine Corps, in its desire to improve quality among its enlisted personnel, sought young men who

possessed higher mental aptitude but did not necessarily have a high school diploma.

Interest in the quality of the people enlisting in the services continued to increase. Congress began showing serious concern for the quality of servicemen and in January 1974, directed that 55% of those young men enlisting in the services during the fiscal year be high school graduates. Since the Marine Corps was halfway through the fiscal year, the recruiting forces considered it almost impossible to obtain the 55% high school graduate quota from the manpower market at that time. The quota was not met, however, the Marine Corps continued to reduce the number of recruits of mental group IV and to increase its emphasis on obtaining young men of mental groups I-III, preferably of mental groups I-IIIA. The requirement to obtain increased numbers of high school graduates was not new to the Marine Corps. They had current directives requiring a minimum of 65% of the new recruits to be high school graduates; however, these orders were not enforced at that time. 16

The Marine Corps was experiencing difficulties during this period of adjustment to the all-volunteer concept. Marine officials finally became convinced that the predictor of a successful Marine was the fact that he had an earned high school diploma. Increased pressures to obtain more high school graduates resulted from increasing disciplinary problems and high attrition rates of trainees. The increased attrition that concerned the Marine Corps and Congress made it imperative that something be done to curtail this drain on manpower. The increased attrition that convinced that the Marine Corps must enlist a higher percentage of high school graduates if quality manpower needs were to be satisfied. The studies of recruit quality traits that previously had been conducted for

the Marine Corps provided valuable information that reemphasized the importance of the high school diploma. The Marine Corps, as a result, established policies that increased the percentage of high school graduates recruited and continued reducing the number of personnel of mental group IV. 18

The combination of the increased number of high school graduates and the reduction of the number of mental group IV enlistees appeared to be an effective policy for obtaining higher quality enlisted personnel in the Marine Corps. Abnormal attrition began to decline and disciplinary problems were reduced as the percentage of enlisted high school graduates increased. Problems have been encountered in obtaining a sufficient number of high school graduates because of serious competition in the job market; however, efforts to attract them to the Marine Corps were increased. The increased efforts enabled the Marine Corps to meet its manpower goals of high school graduates in sufficient quantities during fiscal year 1977. Marine commanders in the field soon recognized that the Marine who had graduated from high school was more receptive to training and enhanced the quality of the Marine Corps.

#### Summary

The interest in obtaining quality personnel in the Armed Forces has intensified in recent years. The beginning of the emphasis in obtaining quality personnel began with the establishment of minimum mental standards which were initiated in the late 1940's. Concern for the climbing numbers of enlisted personnel from lower mental groups increased throughout the Department of Defense and resulted in elevating the minimum criteria for enlistment. Quality problems continued to worry the Armed Forces as interest was directed at the implementation of an

all-volunteer force concept. Concern centered around the question of the quality of young men who would be attracted by the all-volunteer force concept.

The Vietnam War era delayed the realities of the all-volunteer force concept. Emphasis was initially placed on obtaining young men with higher mental aptitudes and reducing the number of those people in the low mental group IV category. Experience proved that this was the wrong approach; difficulties were encountered with increasing abnormal attrition and disciplinary problems. Congress expressed its concern by imposing a minimum percentage of high school graduates who would enter the services. The Marine Corps soon was convinced that the high school graduate was a predictor of quality, and began to reduce and eliminate many of the difficulties previously experienced.

#### **FOOTHOTES**

- l. John A. Sullivan, "Qualitative Requirements of the Armed Forces," <u>Studies Prepared for the President's Commission on an All-Volunteer Force</u>, Vol I (Washington, D.C.: U.S. Government Printing Office, 1970), p. 1-2-10.
  - 2. Sullivan, p. 1-2-1.
  - 3. Sullivan, p. 1-2-10.
  - 4. Sullivan, p. 1-2-3.
  - 5. Sullivan, p. 1-2-3.
- 6. Richard V. L. Cooper, <u>Military Manpower and the All-Volunteer</u> Force, (Santa Monica, Calif.: The Rand Corporation, 1977), p. 127.
  - 7. Cooper, p. 127.
- 8. Walter Y. Oi and Brian E. Forst, "Manpower and Budgetary Implications of Ending Conscription," Studies Prepared for the President's Commission on an All-Volunteer Force, Vol I (Washington, D.C.: U.S. Government Printing Office, 1970), p. 1-1-2.
  - 9. Sullivan, p. 1-2-45.
- 10. Samuel Jaskilka, "Quality and Leadership," Marine Corps Gazette, January 1975, p. 14.
  - 11. Jaski1ka, p. 14.
- 12. Anne Hoeberg and Newell H. Berry, "There's No Doubt About It, A Diploma Goes A Long Way for Combat Efficiency," Marine Corps Gazette, September 1977, p. 57.
  - 13. Hoeberg and Berry, p. 58.
- 14. Bernard E. Trainor, "The Personnel Campaign Issue Is No Longer In Doubt," <u>Marine Corps Gazette</u>, January 1978, p. 23.
  - 15. Jaskilka, p. 15.
  - 16. Trainor, p. 23.
- 17. U.S. Congress, House, Committee on Armed Services Subcommittee on Military Personnel, Marine Corps' Recruit Training and Recruiting Programs, Hearing, 94th Cong., 2nd Sess., September 29, 1976 (Washington, D.C.: U.S. Covernment Printing Office, 1976), p. 4.

18. Louis H. Wilson, "CMC Reports to Congress: We Are Ready. Spirit Is High," <u>Marine Cours Gazette</u>, April 1977, p. 23.

19. Trainor, p. 27.

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20. William Gilfillan, III and J. R. Brown, Jr., "Recruiting An All-Volunteer Force," Marine Corps Gazette, November 1977, p. 82.

#### CHAPTER 3

#### THE VALUE OF EDUCATION

The concern for the quality of young men entering the Armed Forces, and especially within the Marine Corps, has generated interest in determining the type of person who is most likely to succeed in the military. Specific areas that are addressed in identifying what factors constitute "quality" servicemen are: abnormal attrition, disciplinary problems, and job performance. These three areas were selected because of the problems experienced since the end of the draft as the services intensified their interest in improving the quality of the enlisted population. I

The Marine Corps and the other services were disturbed by the costly abnormal attrition or early discharge rates. Disciplinary problems also accounted for additional concern because of the increased waste of funds and manpower that was being consumed with no recognizable beneficial returns. The high cost of acquiring and training replacement personnel for those servicemen who were discharged or whose actions result in disciplinary actions that inhibit their useful productivity is a serious roncern. As efforts were directed toward reducing these liabilities and improving personnel, interest intensified in the long sought after predictors that would identify the persons who would be successful in the military environment. It is more economical to spend time and money recruiting people who will do their jobs well and complete their contracted enlistment time than to tolerate lower quality personnel.

These quality individuals are in the same groups of people who are in demand within the civilian manpower market; thus a very competitive personnel atmosphere exists. The services are vitally interested in determining what indicators, when possessed by recruits, would be key indices of their ability to complete the enlistment period successfully. This chapter presents data that identifies and supports a specific predictor.

#### Attrition

The data presented on abnormal attrition concerns enlistees discharged prior to completing their first enlistment period. Reasons for the early discharges are the servicemen's inability to meet the minimum behavior or performance standards established by the services. 4 Medical discharges are not discussed nor included in this data.

Abnormal attrition rates were escalating at the conclusion of the Vietnam conflict. This loss of potentially valuable manpower became the focal point of Congressional legislation in 1974. The lawmakers were convinced that an increase in a young man's educational level would enhance his chances of success in the military, thereby improving the composition of manpower in the services. In an attempt to reduce or control the high rate of young men being discharged abnormally early, the Congress directed the Marine Corps to obtain more high school educated recruits; specifically, a minimum of 55% of all future enlistees must have a high school diploma. This increase in the educational level of young recruits was expected to be a means of reducing or solving the attrition problem.

The Marine Corps experienced high abnormal attrition shortly after young men reported for active duty. Recruits are exposed to a life style

of discipline, regulated daily schedules, and demanding training requirements. Some young men were unable to adapt to or cope with the rigors of recruit training, thereby becoming ineffective as future servicemen and they were subsequently discharged from recruit training. Marines responsible for recruit training were interested in identifying characteristics in a young man that would enable him to adjust more easily to military life and be more trainable.

The Marine Corps' first reaction toward reducing attrition was to recruit people who could be trained more easily. The experiences encountered with the discharging of young men at the recruit depots supported the idea that more emphasis must be directed toward recruiting persons with higher mental aptitude. Emphasis was placed on the hypothesis that the higher mental group personnel would be more receptive to military training. As more enlistees were recruited with higher aptitudes and the number of individuals of mental group IV were reduced, the attrition rates remained high with no appreciable changes. A limitation was placed on the number of young men who could be discharged as an alternative. This policy met with adverse reaction from within the Marine Corps as it was perceived that lower qualified personnel were being allowed to remain in the service. The dilemma caused by the attrition of young men became more intense. Recruits had to be trainable and while their mental abilities were related to their capabilities to learn, an increase in mental standards for enlistment was not the answer to reducing the attrition rates. Another ingredient was necessary, and that ingredient appeared to be the perseverance of seeing a job through to its completion or motivation. Young men who had completed their high school education had demonstrated, to some degree, the ability to remain with an objective until it was completed.

Table 1 presents data that supports the high school graduate as one who is least likely to be discharged because of failure to meet minimum behavior or performance standards. This group of enlistees presents the lowest attrition percentages within all mental groupings. Within that segment, mental groups I-III present the lowest attrition rates. While the mental group IV has the highest discharge rate of the high school graduate category, the people comprising that group are discharged far less frequently than either the mental group I or II non-graduate.

Percent of Enlisted Accessions Discharged for Failure to Meet
Minimum Behavior or Performance Criteria: Fiscal 1971
Enlistees Separated as of 30 June 1973. (Percent)

		Mental (			
Education	I-II	III	IV	A11	
HSG	6.6	9.4	13.7	8.6	
NHSG	20.7	24.5	26.8	24.6	
A11	8.8	15.7	21.1	14.3	

Source: "Attrition Rates for Failure to Meet Minimum Behavior or Performance Criteria by Geographical Region of Entry," Directorate for Manpower Research, Office of the Assistant Secretary of Defense (Manpower and Reserve Affairs), Manpower Research Note 74-2, February 1974, Table X.

The total percentage of high school graduates who are discharged for failure to meet minimum behavior or performance standards is only 8.6 percent as compared with the total non-high school graduates' percentage of 24.6 percent. The large difference between the percentages of these two groups of young men indicates that the more desirable recruit

would have a high school education. The least desirable enlistees would be those who are in mental group IV and who have not completed high school. Table 1 also indicates that almost 25% of the non-high school graduate enlistees are discharged early because of their inability to meet minimum behavior and performance expectations. Since the services are interested in recruiting primarily from the mental group I-III manpower market, nearly twice as many non-high school graduates are attrited early in that category when compared with those recruits who were high school graduates and fall into the mental group IV category. 10

The figures presented in Table 1 concern men who joined the military in 1971. Based on studies conducted by the Department of Defense over the past 20 years, the information remains valid and represents the same basic conclusions. Attrition rates have varied greatly over the past 20 years; however, the relative difference in aptitude and education has remained comparable.

Table 2 presents data pertaining to attrition as affected by age and educational level. Initial analysis of the table shows recruits having 1 to 10 years of education as being the least desirable of all the age groups. These individuals have an average discharge rate of almost 50% of those enlisted in that category. Those recruits who are 17 years of age and have received some college have the same 43% attrition rate as the 18 and 19 year olds who have 1 to 10 years of education.

Personnel who have obtained their General Equivalency Diploma (GED) may be considered in the same category as those people who have 11 years of schooling because of the similarity in their attrition percentages. The only significant difference appears in the 21 or more age group. These recruits who are 21 years of age or older have a lower

Table 2 Two Year Early Attrition Rates By Age and Educational Level

	Age at Enlistment										
Educational Level	17	18-19	20	21 or more	Total						
1-10 Years	41%	43%	51%	61%	43%						
11 Years	32	33	40	47	34						
General Equivalency Diploma (GED)	32	33	41	37	38						
High School Graduate	17	17	24	28	19						
Trade School Graduate	a	9	16	29	20						
Some College Training	43	21	23	26	25						
Total, All Educational Levels	34	26	31	38	30						
<sup>a</sup> Too few for statis	tical com	parison.									

Warren T. Matthews, "Quality of Marines: Test Scores, Personnel Data, and Performance," First Term Enlistment Attrition Volume I: Papers ed. H. Wallace Sinaiko, (Washington, D.C.: Smithsonion Institution, 1977), p. 430. Source:

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attrition rate than those of the same age with 11 years of education.

Regardless of the similarity between the two groups, those servicemen with an 11 year education or who have obtained their General Equivalency Diploma have an overall attrition percentage that is higher than personnel who have at least completed their high school education.

The lowest overall attrition rates of any group in the table are presented by high school and trade school graduates. Of the two, the trade school graduate excels in the area of reduced attrition in all age categories except the 21 years old or older group; their attrition rates are slightly higher than for the high school graduate of the same age. The early discharges in all categories rise when the servicemen have an entry age of 20 years or greater. The high school and trade school graduates 21 years of age and older closely equate to the same attrition rate as those who have 11 years of education and who are younger. The enlistees who have some college are found to be between the high school and trade school graduates and those who have 11 or more years of education but have not graduated. The ideal grouping of recruits, those who possess the lowest attrition percentages, are the high school and trade school graduates of 18 to 19 years of age. The trade school graduates of 18 to 20 years of age are shown as the most favorable with the lowest attrition.

The figures presented support the Marine Corps' decision to reduce the number of non-high school graduates because of the group's history of high attrition rates. The knowledge gained from schooling does not seem to be of importance as far as predicting success; what is important is that the person has the characteristic of completing one program before beginning another. The enlistment of lower quality

individuals, those with less education, results in earlier discharges and increases the expenses of maintaining an armed force.

## Disciplinary Problems

Discipline has always been an integral part of training, not only in the Marine Corps, but in all military services. The necessity to transform young men from a multitude of civilian walks of life into a well-functioning team within a short period of time demands, as a minimum, the obedience to orders. In order to accomplish this task, young men must be willing to subject themselves to a disciplined environment, which only comes from experiences of their rearing and background. Marine recruits are taught the meaning of discipline and the essentiality of everyone working toward the betterment of the group in the early stages of recruit training. The lessons learned about discipline during recruit training serve as building blocks for future military success. All aspects of the military relate in some degree to discipline; therefore, they explain the intense interest that the services have oriented toward this subject. A deterioration of discipline in any area is a serious situation which requires immediate responses to correct the inadequacy as quickly as possible.

The Marine Corps was faced with serious problems during the first half of the 1970's as declining discipline became an area of major concern. Unauthorized absences, major crimes, and desertion were among the areas of increasing disciplinary troubles. Non-judicial punishment and courts-martial statistically increased as the Marine Corps sought to cope with the problems and bring to justice those responsible for the infraction of orders. The magnitude of this problem was new to the Marine Corps, as never before had problems of this nature been experienced in

such volume. The dilemma that the Marine Corps experienced far exceeded the disciplinary complexities of previous wars and conflicts. 16

The seriousness of the actual disciplinary problems concerned the Marine Corps; however, there were other areas that were equally as disturbing. The administrative burden of bringing to justice those responsible for the infractions was expensive and time consuming. The expenses were not restricted to cost alone. They included legal proceedings and required additional personnel to perform such varied duties as administrative clerks and prison guards. These jobs often were performed by Marines who had initially been trained to serve in other occupational specialties, such as driving tanks and firing artillery weapons. The performance of these missions placed an added burden on the Marines who were performing satisfactorily. The added responsibilities that faced these individuals and the associations they had with the offenders of military standards were more than some of these young men could take. Some left the Marine Corps, compounding the already high unauthorized absence rates and became members of the groups from which they were trying to escape. 17

There were many reasons for disciplinary problems within the Armed Forces. A significant consideration is the serviceman's inability to adapt to service life. The services sought means of identifying those characteristics which would be inherent to a person's ability to adjust to the service. Mental ability had been associated with trainability; however, little correlation appeared to exist between the number of disciplinary problems and mental groups. The age of the individual at the time of his enlistment in the service had a definite effect on attrition, but it added little or no information that could be used to

predict disciplinary problems. 19 The best predictor of possible disciplinary trends was identified as the educational level of the young recruit. 20 The possession of the high school diploma was determined to be a means of predicting those individuals who were less likely to become disciplinary problems. 21 An example of the lack of disciplinary involvement of the group is that courts-martial and non-judicial punishment occurred 1.5 to 3 times as often among non-high school graduates as they did among those who possessed a high school diploma. 22

In 1975, the Marine Corps began placing more emphasis on recruiting high school graduates in order to resolve the disciplinary problems and improve the overall quality of the Marine Corps. A goal was established that required 75% of the enlistees recruited in fiscal year 1977 to be high school graduates. This goal was exceeded during the first three months of fiscal year 1975 (July, August, and September): of those young men enlisted, 76% of them had graduated from high school. 23 Table 3 illustrates the changes that began to take place within the Marine Corps as a result of the increasing number of high school graduates being recruited. As the number of high school graduates and the higher mental groups (I-IIIA) increased, mental groups IV-V decreased as did attrition, deserters, average confinement population, and the unauthorized absence rates. More time could be utilized to effect better training which enhanced the readiness posture of the Marine Corps. Individual Marines were more satisfied and began to realize the experiences expected upon enlistment. An increase in the morale of the individual Marine began to escalate, increasing individual effectiveness.

Table 4 presents the percentages of high school graduates that were recruited over the past eight years. The years from 1970 to 1974

Table 3

Quality Changes Taking Place in the Marine Corps From
FY 1975 Through the 3rd Quarter FY 1977\*

	*Information	contained	in Table 3 was	provided t	y Headquarters,
U.S.	Marine Corps.	(Code MPP).	Washington, D	. C.	

1.	Diploma High School Graduates	increased i	bу	13.7%
2.	MG I-IIIA% by Recruit Depot Test <sup>a</sup>	increased (	by	9.0%
3.	NG IV-V% By Recruit Depot Test	decreased	by	13.7%
4.	Average Monthly UA Rate (per 1000)	decreased	ру	45.7%
5.	Average Monthly Desertion Rate (per 1000)	decreased	by	50.0%
6.	Najor Crime Statistic <sup>b</sup> (Available from FY 1976 through 3rd quarter FY 1977)	decreased	bу	11.1%
7.	Average Confined Population	decreased	bу	51.3%
0.	Major Command Special Courts-Martial <sup>C</sup>	decreased	Ьу	25.6%
9.	Non EAS Attrition <sup>d</sup>	decreased	bу	17.0%
10.	Deserter at Large Population <sup>e</sup>	decreased	by	61.6%
11.	UA at Large Population <sup>e</sup>	decreased	bу	48.4%

<sup>a</sup>All Marines are tested at AFEES and again upon arrival at the recruit depots. Recruit depots' test results are utilized in classification and assignment process.

bIncludes forcible rape, murder, larceny, burglary, aggravated assault, auto theft and robbery committed aboard Marine Corps commands with a PMO.

CIncludes only those SPCM where Marine Corps Military Judges presided.

dIncludes only unsuitable, unfitness, misconduct, good of the service and expeditious discharges. FY 77 and FY 76 figures include respectively 1656 and 2644 discharges under Expeditious Discharge Program which was implemented during November 1975.

eEnd of June 1977 data.

indicated a decrease in the high school graduates enlisted, while the years from 1975 to 1977 presented a steady increase in the percentages of high school graduates entering the Marine Corps which surpasses the previous 4 year period. These figures support the fact that Marine officials realized the value of completing an education with respect to the young men entering the service.

Table 4

Percentage of High School Graduates Obtained by Fiscal Year (Does Not Include GED's)\*

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FY	1970	52.8%
FY	1971	49.9%
FY	1972	50.8%
FY	1973	49.6%
FY	1974	48.9%
FY	1975	51.5%
FY	1976	60.9%
FY	197***	75.4%
FY	1977	70.0%

<sup>\*</sup>Statistics provided by Headquarters, U.S. Marine Corps, Code MPP, Washington, D.C.

The obvious improvement that the Marine Corps made in reducing the disciplinary problems it once encountered is indicative of the effort that has been expended to identify those characteristics within the person who would be less likely to become involved in disciplinary action.

<sup>\*\*</sup>FY 197T was an interim period of 3 months, July, August and September, in 1976 when the federal government changed the dates of the fiscal from July to June to October to the end of September of each year.

Young men who met the academic as well as the behavioral standards of high school and their communities are more likely to conform to the disciplines and standards of the services. 24 This knowledge has enhanced the services ability to reduce many of their disciplinary problems.

## Job Performance

Job performance is one of the most important indicators of a serviceman's potential for success. The manner in which young men accomplish their tasks indicates the degree of reliability and dedication necessary to succeed in military and civilian jobs. An individual whose job performance is considered to be satisfactory or better is normally recognized for his efforts. The most common method of recognizing good job performance is promotion within the organization. A means of rewarding military personnel who perform in an exceptional manner is to promote them meritoriously, that is, ahead of their contemporaries.

The individual who is considered to be a quality performer possesses those traits that are considered desirable in that they lead to a higher quality of accomplishment and result in a motivated force. Productivity, or job performance, has been identified as a major factor which directed the services' desires in personnel. It was one of the reasons the military sought to reduce the number of enlistees who were classified as mental group IV. An ultimate goal of all employers is to hire people who will perform adequately with minimum supervision; this is less expensive and often requires fewer people for the job.

Trainability could be considered the initial step in identifying good job performance. Studies have revealed that there is one quality indicator that prevails in the area of trainability: the level of education the trainee completed prior to enlistment. Those servicemen who

have completed their high school education are more receptive to training and perform much better when attending formal military schools than those of similar mental groups who have not graduated. The success of the military trainee goes farther than how well he masters his subjects in school: the trainee who possesses a high school diploma is more likely to complete the school, whereas the non-high school graduate has a much higher failure rate while attending schools than the graduate. Chart A presents a good illustration of the failure rates between high school graduates and non-graduates.

A firm indicator of the serviceman's success is the promotion he receives within a given period of time. Again, the high school diploma appears to be one of the major predictors in identifying those most likely to gain this recognition. The high school graduate, mental group III, has a significantly greater probability of obtaining higher rank than the non-high school graduate of mental group I or II. 32 Table 5 illustrates the percentage rating given by supervisors of 25,000 individuals who were at the end of their four year enlistment. These people were evaluated on their productivity and then grouped in the areas of educational levels and mental aptitudes. Those individuals who had obtained at least a high school education were rated far superior in relation to productivity than the less educated, regardless of mental group scores. The only close comparison between the graduate and those individuals who have not earned a diploma (includes GED graduates) is the comparison between the mental group IV high school graduate and the mental group I non-graduate. These ratings are very subjective because they are the individual opinions of supervisors; however, the vast number considered lends credibility to the data. The data clearly set aside those individuals who have at least

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Table 5<sup>33</sup>
Estimated Productivity of Enlisted Personnel at the End of Four Years of Military Service<sup>a</sup> (percent)<sup>b</sup>

		Me	ntal Grou	þ	
Education	I	11	III	IV	A11
College Graduates	107	107	108	(c)	108
Some College	113	105	106	100	107
High School Graduate	108	103	100	96	103
GED <sup>d</sup>	94	92	90	82	90
Some High School	96	90	83	75	85
All	109	102	98	90	100€

Source: Unpublished tabulations provided by Robert M. Gay, The Rand Corporation.

<sup>&</sup>lt;sup>a</sup>Supervisors were asked to rate specific individuals in their charge on a percentage scale relative to the average four-year specialist. Estimates based on 25,000 individuals from 50 occupational specialties in the Army, Navy, and Air Force.

<sup>&</sup>lt;sup>b</sup>100 percent equals the average four-year specialist.

CLess than 10 observations.

d"GED" refers to the General Education Degree and reflects individuals who do not have a high school diploma but who have passed a high school equivalency test.

<sup>&</sup>lt;sup>e</sup>Estimates were normalized so that the entire population averaged 100 percent. The actual sample-wide average was 97.9. Thus, the raw score for each cell was adjusted by dividing by 0.979.

completed their high school education as being more receptive to their supervisors! instructions and they are able to satisfy better the demands of the job by surpassing their less educated counterpart's performance according to their supervisors.

The frequency that servicemen are promoted is directly related to how well they perform their jobs. Chart B explains in detail how the high school graduate compares with the non-high school graduate with respect to the probability of promotions in various experiences and occupational areas. The more rapidly people are able to be promoted within a given time period, the stronger the indications are that they are performing at a much higher level of performance than others who are not recipients of promotions. Education appears to be a key factor in how well individuals compete for promotion. There are two areas where the non-high school graduate, mental groups I-II, did excel beyond the high school graduate, mental group IV-V. These areas were the ability to perceive technical knowledge and the attainment of promotion to the grade of E-5 within two years. 34 An overall predictor within the Marine Corps of those individuals who would achieve promotion to ranks through Sergeant (E-1 through E-5) was the possession of a high school diploma. 35 This same characteristic applied to young Marines completing recruit training. High school graduates are more likely than the non-graduates to exhibit exceptional performance that would warrant promotion to Private First Class (E-2) upon completion of recruit training. 36

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Young Marines who perform exceptionally well, demonstrate unique potential to excel, and desire special recognition for their efforts are meritoriously promoted to the next higher rank as an award for their overall excellence. Table 6 presents the meritorious promotions from

Table 6\*

Marine Corps Meritorious Promotions, E-1 Through E-5
Of First Term Enlistees

	E-1-E-5	Invalid Count	NHSG	GED	HSG	HSG+
		FY 74	·			
Total Marines % of Total Marines	144,419	2,186 1.51%	54,928 38.03%	13,811 9.56%	65,886 45.62%	7,608 5.27%
Total Meritorious Promotions % of Meritorious	21,503	270	6,647	855	11,832	1,899
Promotions	14.89%	1.26%	30.91%	3.98%	55.03%	8.83%
CCC COMP COMP	11,000,0	1.26% FY 75		محبة ان المكيدان البدو درود		- <del>3 3 3 5 (</del> ¥.
Total Marines % of Total Marines	149,756	2,997 2.00%	52,731 35.21%	14,624 9.76%	72,850 48.65%	ű,554 <b>4.38</b> %
Total Meritorious Promotions % of Meritorious	25,739	603	7,294	1,469	14,793	1,580
Promotions		2.34%	28.34%	5.71%	57.47%	6.14%
		FY 76				
Total Marines % of Total Marines Total Meritorious	146,131	4,783 3.27%	44.258 30.29%	13,350 9.14%	76,975 52.67%	6,765 4,63%
Promotions S of Meritorious	23,030	403	4,563	1,536	14,964	1,561
Promotions		1.75%	19.81%	6.67%	64.98%	6.78%
		FY 77				
lotal Marines % of Total Marines Total Meritorious	143,587	157 .11%	37,323 25.99%	12,090 8.42%	87,025 60.61%	6,992 4.87%
Promotions % of Meritorious Promotions	24,788	341 1.38%	4.330 17.47%	1,270 5.12%	17.164 69.24%	1.683 6.79%
		FY 7T	(3 months	July, /	Aug & Sep	t)
Total Marines % of Total Marines Total Meritorious	145,975	137 .09%	35,239 24.14%	12,271 8,41%	91,190 62.47%	7,138 4.89%
Promotions % of Meritorious	5,487	6 <b>46</b>	<b>95</b> 5	352	3,193	341
. Promotions		11.77%	17.40%	6.42%	58.19%	6.21%

<sup>\*</sup>Data provided by Headquarters, U.S. Marine Corps, Code MPP, Washington, D.C.

E-1 through E-5 awarded to Marines on their first enlistment from fiscal year 1974 until the end of September 1977. The data indicate that young men who have received a high school or higher education are meritoriously promoted more often than those Marines in the other categories. Those Marines who have received more than a high school education possessed the highest percentage of meritorious promotions and in most years, almost 25% of them became the recipients of a meritorious promotion. The non-high school graduate who had received his General Education Development certificate had the least chance of being meritoriously promoted in most years. The non-high school graduate has only a slightly better chance than the GED holder of being promoted meritoriously. The higher the level of education upon enlistment into the Marine Corps, the better the chances of being awarded a meritorious promotion.

Charts C and D exhibit additional data that relate to the potential success of the high school graduate when compared with the non-high school graduate. The high school graduates' chances of succeeding are greater than the non-graduates in almost all areas. Those areas where the non-high school graduate is introduced as having a better chance of success is so small that they are not considered to be of any significance.

The quality of job performance is correlated to the years of education a recruit receives prior to his enlistment. The higher his education, the greater his productivity will be and the frequency for which he will be recognized for his efforts by promotions to the next higher rank will increase. Productivity will continue to be an important aspect of the services' desire to increase overall quality. People who are more productive will be the key to this issue.

## Qualities Developed Within A High School Graduate

Those young men who have completed their high school education are considered to be the quality personnel sought by the Armed Services. The traits that they possess, as presented by the data, create a group of people who will have a major impact on the overall quality of the Armed Forces. This unique group of people are placed on a pinnacle which portrays their overall superiority when compared with those less educated. The comparison is not just one of close relationship, but one of major separation.

The academic achievements of what the students have learned in school are not the primary reasons of the graduates' success. As previously pointed out, mental group IV graduates surpass the high mental group I and II non-graduates in many areas; therefore, there is another predominate factor that bears a major impact on these young men. This factor is the experiences afforded high school students as they progress through the school years. In order for them to successfully graduate, students must learn to cooperate with not only the school's faculty, but they must also get along with their fellow students. A degree of teamwork is required in many classes that assists the persons in adapting more easily to military service. Those young people who graduate have indicated that they are trainable in that they have met certain academic requirements directed by the educational system. 37 More importantly, they have demonstrated that a degree of discipline has been instilled in them as they have met certain behavioral standards not only in the school but in their communities as well. 38 This acceptance of discipline is a major characteristic that places people in this category ahead of the nongraduate.

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Parents of these young people also play an important role in their scholastic success. Often it is the parent's concern and encouragement that has kept the students in school and helped them gain an understanding of completing those jobs that are started. Parental supervision and guidance instill certain qualities in young men that have helped them overcome many difficulties that have caused others to throw up their hands and quit when the requirements became demanding. These special interests have also assisted the graduate in accepting discipline as he has most likely been subjected to some degree of discipline throughout his life; therefore, these make the transition within the military a much easier one.

The perseverance that is gained in order to meet the many requirements for graduation is one of the most important characteristics that the high school graduate develops. It is this trait that has a major effect on the quality of the personnel entering the services. Recruits who possess this indicator are good performers and are rewarded for their efforts of remaining with a specific job until it is adequately completed. An individual's past performance is an indicator of present performance. 39

The practices and habits that are developed in just a few years of schooling develop qualities within young men that will play an important role in their future success. These young people are motivated and receptive to discipline and create a very competitive manpower market because the civilian labor forces and the military alike have a strong need for these individuals as they are considered to possess the quality indicators of success.

### **FOOTNOTES**

1. Richard V. L. Cooper, <u>Military Manpower and the All-Volunteer</u>
Force, (Santa Monica, Calif.: The Rand Corporation, 1977), p. 138.

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2. Cooper, p. 186.

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- 3. Cooper, p. 139.
- 4. Cooper. p. 139.
- 5. Bernard E. Trainor, "The Personnel Campaign Issue Is No Longer in Doubt," <u>Marine Corps Gazette</u>, January 1978, p. 23.
- 6. Marshall G. Greenberg and Gerald McConeghy, "Exploratory Development Research of U.S. Navy-Marine Corps Personnel Phase I: Factors Affecting Attrition." First Term Enlisted Attrition. Vol I: Papers, ed. H. Wallace Sinaiko, (Washington, D.C.: Smithsonian Institution, 1977, p. 205.
- 7. U.S. Congress, House, Committee on Armed Services Subcommittee on Military Personnel, Marine Corps' Recruit Training and Recruiting Programs, Hearing, 94th Cong., 2nd Sess., September 29, 1976 (Washington, D.C.: U.S. Government Printing Office, 1976), p. 27.
  - 8. Cooper, p. 140.
  - 9. Cooper. P. 141.
  - 10. Cooper, p. 141.
  - 11. Cooper. p. 141.
- 12. Warren T. Matthews, "Quality of Marines: Test Scores, Personnel Data, and Performance," <u>First Term Enlisted Attrition, Vol I: Papers</u>, ed. H. Wallace Sinaiko, (Washington, D.C.: Smithsonian Institution, 1977), p. 431.
  - 13. Cooper, p. 186.
- 14. Anne Hoeberg and Newell H. Berry, "There's No Doubt About It, A Diploma Goes A Long Way for Combat Efficiency," Marine Corps Gazette, September 1977, p. 60.
  - 15. U.S. Congress, September 29, 1976, p. 4.
- 16. Martin Binkin and Jeffrey Record, Where Does the Marine Corps Go From Here? (Washington, D.C.: The Brookings Institution, 1976), p. 62.

- 17. Trainor, p. 25.
- 18. John A. Sullivan, "Qualitative Requirements of the Armed Services," <u>Studies Prepared For The President's Commission on An All-Volunteer Armed Force, Vol I (Washington, D.C.: U.S. Government Printing Office, 1970), p. 1-2-34.</u>
- 19. Matthews, "Quality of Marines: Test Scores, Personnel Data and Performance," p. 437.
  - 20. Cooper, p. 130.
  - 21. Cooper, p. 130.
  - 22. Cooper, p. 130.
  - 23. Brookings, p. 64.
- 24. \_\_\_\_\_, "Quo Vadis Marines'," Officer Review, November 1977, p. 2.
  - 25. Cooper, p. 129.
    - 26. Cooper, p. 129.
    - 27. Cooper, p. 138.
    - 28. Cooper, p. 129.
- 29. Sheldon E. Haber, <u>Factors Influencing Trainability In The</u>
  <u>Marine Corps</u>, (Washington, D.C.: The George Washington University, 1975),
  P. 7.
- 30. Steve Verna and Thomas L. Mifflin, An Analysis of Marine Corps School Assignment and Performance, (Arlington, Va.: Center for Naval Analysis), p. 65.
  - 31. Verna and Mifflin, p. 6.
  - 32. Haber, p. 9.
  - 33. Cooper, p. 131.
  - 34. Haber, p. 9.
- 35. Warren T. Matthews, "Quality of Marines: Pre Enlistment Screening Based on Predicted Performance," (Arlington, Va.: Center for Naval Analysis, 1977), p. 16. (Staffing Copy)
- 36. Matthews, "Quality of Marines: Pre Enlistment Screening Based on Predicted Performance," p. 16.
  - 37. \_\_\_\_\_, "Quo Vadis Marines'," p. 2.

36. \_\_\_\_\_, "Quo Vadis Marines"," p. 2.

39. Hoeberg and Berry, p. 58.

#### CHAPTER 4

### CONCLUSION AND TOPIC FOR FURTHER CONSIDERATION

High school graduates are clearly presented as highly desirable manpower resources for the Armed Services. These young men are assets which improve the quality and potential of the military in that they may be depended upon to exhibit good performance characteristics and create fewer disciplinary problems. The beneficial impact that the graduate provides the Armed Forces is monumental, and data indicate that the diploma is a very important instrument for predicting quality young men.

There is no doubt about it, the high school graduate is clearly a quality indicator for the Marine Corps. Data indicate he is superior in every aspect to the less educated personnel. The benefits received from this quality segment of society far outweigh the additional efforts required to obtain them. The quality that is attributed to those young men who have graduated from high school is unparalleled by any other segment of society that is eligible and would consider enlistment in the Marine Corps.

## Topic For Further Investigation

This study provides data that presents the high school graduate as a definite quality indicator, one that should direct the Marine Corps' recruiting efforts in a direction leading toward personnel improvement. This solution addresses one part of overall manpower improvement within

the Marine Corps. Another area is the methods or procedures established to increase retention of good Marines and build a strong reserve force. This is a major undertaking, especially since the segment of the national population that is of military age is declining, and recruiting for reserve forces is becoming continually more difficult. The means of providing some assistance in this area is a new enlistment commitment that should be considered.

The new enlistment agreement that is suggested is similar to the British enlistment system. A young man who meets all of the current enlistment requirements and is a high school graduate would be enlisted for a period of six years of active duty. This portion of the contract contains basically the same conditions as the current enlistment military contract for all services in that all young men entering the military agree to a six year enlistment; however, the length of time served on active duty will vary from six months for the active reserve to a special program of six years active duty.

Under the new agreement, all young men would be enlisted for six years of active duty except those who specifically desired to become members of the active reserve. The six year enlistees would receive the same recruit training that current recruits undergo and upon completion of that training, they would proceed to their advanced training and ultimately join a unit where they would begin performing in the area for which they were trained.

When the young Marine reaches six months of active duty, the time will arrive for him to renew his contract with the Marine Corps and for the Marine Corps to renew their portion of the contract with the Marine. If the Marine desires to continue his enlistment and the Marine Corps

feels that he has demonstrated adequate potential to become an asset to the organization, the remaining portion of the six year commitment would become effective with no further requirements. If either party desires to terminate the contract at this time, the Marine is discharged from active duty and becomes a member of the nearest reserve unit to his home or place of residence.

Many advantages are recognized within this system as it provides a means of strengthening Marine reserve units. The requirement to join a reserve unit would insure that training received to this point would not be in vain, but would be an excellent means of obtaining the maximum benefits from the training. This new procedure does not advocate that a mass of undesirables would be forced into struggling reserve units. On the contrary, Marines of current quality or higher would begin filling reserve manpower needs. All enlistments would be of the highest quality with maximum emphasis directed toward enlisting high school graduates. Young men who are considered undesirable would receive a discharge from the service as is the current policy.

It is true that some Marines who had performed poorly during their initial six months of active duty would enter reserve units. On the other hand, Marines of the highest quality might elect to return to their homes because active duty does not suit them, or for various personal reasons that may exist. This system allows both the Marine and the Marine Corps the opportunity to decide who will remain on active duty.

Those individuals who elect to remain on active duty and are accepted have the opportunity to see firsthand what military life is like, both the good and the bad, prior to making a long term commitment. They obviously find military life desirable and challenging, and as a result

they will have higher morale and job performance. Many of these Marines could be expected to reenlist at the end of their enlistment as they had adjusted well and found their employment meaningful.

A very important and beneficial side effect will take place as a result of the implementation of this procedure. Commanders at all levels will be required to exert the best possible leadership throughout the Marine Corps in order to retain the higher quality Marines. A viable, interesting, and motivating training program will have to be initiated to maintain the interest of young Marines and afford them the experience of satisfactory accomplishment that meets the goals they have established and expect. All other duties not related to training will have to be carefully assigned on an equitable basis that is reasonable to all, not requiring the younger, more inexperienced Marine to perform menial tasks in lieu of experienced personnel because it may be more convenient to the commander. Efforts would be required to insure that everyone is treated fairly and every effort is extended to the young enlisted Marine to insure that he is properly cared for and trained in the most professional manner possible. The qualities of leadership would be honed at all levels, thereby building a stronger, more efficient Marine Corps team, and efforts would specifically be directed at the key to the Marine Corps' success and tradition: the individual Marine.

Having determined the quality trait that is necessary to improve the Marine Corps' manpower, and having established a system that enhances leadership and encourages motivation, the Marine Corps would continue to be a leader among the world's Armed Forces. With the introduction of this new procedure, the Marine Corps would be an easier product for recruiters to sell and their requirements for large personnel quotas

would be reduced, thereby allowing them the opportunity to truly seek
"A Few Good Men."

#### **FOOTNOTES**

- l. Warren T. Matthews, "Quality of Marines: Test Scores, Personal Data, and Performance," First Term Enlisted Attrition, Vol I: Papers, ed. H. Wallace Sinaiko (Washington, D.C.: Smithsonian Institution, 1977), p. 443.
- 2. Anne Hoeberg and Newell H. Berry, "There's No Doubt About It, A Diploma Goes A Long Way For Combat Efficiency," Marine Corps Gazette, September 1977, p. 60.
- 3. U.S. Congress, House, Committee on Armed Services Subcommittee on Military Personnel, Marine Corps' Recruit Training and Recruiting Programs, Hearing, 94th Cong., 2nd Sess., September 29, 1976, (Washington, D.C.: U.S. Government Printing Office, 1976), p. 4.
- 4. Louis H. Wilson, "CMC Reports to Congress: 'We Are Ready, Spirit is High'," Marine Corps Gazette, April 1977, p. 23.
  - 5. Wilson, p. 23.
- 6. , Manpower For The Military Draft or Volunteer, Washington, D.C.: Association of the United States Army, 1977), p. 7.

APPENDIX

## APPENDIX

## CHART A

Table 1

Probability of Attaining Rank E-4: Two-Year
Enlistees, 1968 Cohorta

		Probabilis Attaining Re	ty of ank E-4
Ag <b>e:</b>	17 years 18-19 years 20 years and over	.44 .51 .57	
Race:	White Non-white	.55 .47	
Combat	Experience:	Level of Edu Less than H.S.	
Se	rved in Vietnam		
	Mental Groups I and II <sup>b</sup> Mental Group III Mental Groups IV and V	.45 .35 .30	.64 .52 .42
Di	d not serve in Vietnam		
	Mental Groups I and II Mental Group III Mental Groups IV and V	.56 .43 .39	.77 .65 .58
Milita	ry Occupation:		
Gr	ound Combat		
	Mental Groups I and II Mental Group III Mental Groups IV and V	.46 .38 .33	.66 .57 .51
Ge	neral Repair		
	Mental Groups I and II Mental Group III Mental Groups IV and V	.55 .40 .32	.70 .54 .42

Table 1 (continued)

	Level of Less than H.S.	Education H.S. or above
Clerical and Semi-skilled		
Mental Groups I and II Mental Group III Mental Groups IV and V	.52 .40 .35	.74 .63 .54
Other Skills		
Mental Groups I and II Mental Group III Mental Groups IV and V	.50 .37 .33	.72 .60 .52

<sup>&</sup>lt;sup>a</sup>The overall probability of attaining Rank E-4 is .51.

 $<sup>^{\</sup>mathrm{b}}\mathrm{Based}$  on the General Classification Test.

Table 2

Probability of Attaining Rank E-5; Four-Year Enlistees, 1968 Cohort

THE RESERVE TO SERVE THE S

		Probabil Attaining	ity of Rank E-5	
Ag <b>e:</b>	17 years 18-19 years 20 years and over	.3 .5 .5	0	
Race:	White Non-white	.51 .45		
Combat	Experience <sup>b</sup>	laure e e	Malana and and	
Milita	ry Occupation:	Less than H.S.	Education: H.S. or above	
Gr	ound Combat			
	Mental Groups I and Il <sup>C</sup> Mental Group III Mental Groups IV and V	.41 .34 .29	.58 .48 .47	
Ge	neral Repair			
	Mental Groups I and II Mental Group III Mental Groups IV and V	. 49 . 46 . 30	.61 .55 .42	
C1	erical and Semi-skilled			
	Mental Groups I and II Mental Group III Mental Groups IV and V	.51 .37 .37	.73 .56 .62	
Ot	her Skills			
	Mental Groups I and II Mental Group III Mental Groups IV and V	.44 .42 .38	.60 .54 .54	

 $<sup>^{\</sup>mathbf{a}}$  The overall probability of attaining Rank E-5 is .48.

 $<sup>^{\</sup>rm b}$ Approximately the same as the overall probability of attaining Rank E~4.

<sup>&</sup>lt;sup>C</sup>Based on the General Classification Test.

Table 3

Probability of Attaining Rank E-5: Two-Year
Enlistees, 1968 Cohort

		Probabili Attaining F	ty of Rank E-5
Age:	17 years 18-19 years 20 years and over	.04 .06 .07	5
Race:	White Non-white	.06	
Combat	Experience:	Level of E Less than H.S.	
Se	rved in Vietnam		
	Mental Groups I and II <sup>b</sup> Mental Group III Mental Groups IV and V	.06 .03 .02	.11 .06 .03
D1	d not serve in Vietnam		
	Mental Groups I and II Mental Group III Mental Groups IV and V	.10 .05 .03	.21 .11 .06
Milita	ry Occupation:		
Gr	ound Combat		
	Mental Groups I and II Mental Group III Mental Groups IV and V	.08 .05 .04	.16 .10 .08
Ge	neral Repair		
	Mental Groups I and II Mental Group III Mental Groups IV and V	.07 .04 .01	.11 .06 .02
Cl	erical and Semi-skilled		
	Mental Groups I and II Mental Group III Mental Groups IV and V	. 08 . 04 . 02	.19 .08 .05

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# Table 3 (continued)

		Less		Education H.S. or above
Other Skil	s			
Mental Mental Mental	Groups I and II Group III Groups IV and V		.07 .04 .02	.14 .08 .04

<sup>&</sup>lt;sup>a</sup>The overall probability of attaining Rank E-5 is .06.

 $<sup>^{\</sup>mathbf{b}}\mathbf{B}$ ased on the General Classification Test.

Table 4

Probability of Attaining Rank E-4: Two-Year
Enlistees, 1970 Cohorta

		Probabi Attaining		
Age:	17 years 18-19 years 20 years and over	•	32 39 48	
Race:	White Non-white	.43 .36		
Combat	Experience	b		
Milita	ry Occupation:		Education: H.S. or above	
Gr	ound Combat			
	Mental Groups I and II Mental Group III Mental Groups IV and V	.25 .19 .16	.48 .37 .27	
Ge	neral Repair			
	Mental Groups I and II Mental Group III Mental Groups IV and V	.33 .27 .26	.64 .56 .49	
C1	erical and Semi-skilled			
	Mental Groups I and II Mental Group III Mental Groups IV and V	.53 .34 .36	.71 .52 .48	

Level of Education: Less than H.S. H.S. or above

1 Other Skills

Mental Groups I and II	.36	.64
Mental Group III	,33	,50
Mental Groups IV and V	,26	.45

The overall probability of attaining Rank E-4 is .39.

bApproximately the same as the overall probability of attaining Rank E-4

<sup>C</sup>Based on the General Classification Test.

Source: Sheldon E. Haber, <u>Factors Influencing Trainability in the Marine Corps</u>, (Washington, D.C.: The George Washington University, 1975), pp. 10-13.

CHART B

Formal School Failure Rates By Educational Level and Mental Group

Mental Group	High School Graduates	Non-High School Graduates
1	2.6	4.2
II	3.4	7.7
IIIA	3.2	9.5
IIIB	5,3	11.2
IVA	5.9	13.4
IVB	14.0	20.8
٧	23.6	32.9

<sup>&</sup>lt;sup>a</sup>The table is based on a sample of 24,380 recruits who entered the Marine Corps between July 1973 and December 1974.

Source: William H. Sims, <u>Profile of a Successful Marine</u>, (Arlington, Va.: Center for Naval Analyses, 1977), p. 7.

CHART C
Predicted Chances of Success: Profile 3

Mental	ASVAB Percentile			des of		Complet		
Group	Score	\$12	12	GED	11	10	9	8
		·	Age 17					
II	93-100 65-92	90 88	90 89	77 76	77 76	72 71	67 66	62 60
IIIA IIIB	50-64 31-49	84 80	84 80	72 68	72 68	66 62	62 58	56 52
IVA IVB	21-30 10-20	74 73	74 73	61 61	61 61	56 55	51 51	45 45
V	0-9	65	65	52	52	47	43	37
		i	Age 18					
I	93-100 65-92	91 89	91 90	78 77	78 77	73 72	68 67	63 61
IIIĀ IIIB	50-64 31-49	85 81	86 81	73 69	73 69	67 63	63 59	57 53
IVA IVB	21-30 10-20	75 74	75 74	62 62	62 62	57 56	52 52	46 46
V	0-9	66	66	53	53	48	44	38
		:	Nge 19					
I II	93-100 65-92	88 86	88 87	75 74	75 74	70	66	60
IIIA IIIB	50-64 31-49	82 78	83	70	70	69 65	64 60	58 54
I VA I VB	21-30 10-20	72 71	79 72	66 59	66 59	61 54	56 49	50 44
V	0-9	63	71 63	59 50	59 50	54 45	<b>49</b> 41	43 35
		ļ	\ge 20					
I	93-100	35	85	72	72	67	62	57
II IIIA	65-92 50-64	83 79	83 80	71 67	71 67	65 61	61 57	55 51
IIIB	31 <b>-</b> 49 21 <b>-</b> 30	75 69	75 69	63 56	63 56	57 51	53 46	47 40
I VB V	10-20 0-9	68 60	68 60	55 47	55 47	50 42	45 37	40 40 32
			~~	• •	77	<b>⊤</b> €	W/	JE

CHART C (continued)

Mental Group	ASVAB Percentile Score	<b>312</b>	Gra 12	des of S	School (	Complete 10	<u>0</u>	8
		!	Age 21					
I IIIA IIIA IVA IVB V	93-100 65-92 50-64 31-49 21-30 10-20 0-9	81 80 76 72 65 65	82 80 76 72 65 65	69 67 63 59 53 52 44	69 67 63 59 53 52 44	64 62 58 54 47 47	59 58 54 49 43 42 34	53 52 48 44 37 37 28
		!	Age 22					
I IIIA IIIB IVA IVB V	93-100 65-92 50-64 31-49 21-30 10-20 0-9	79 78 74 70 63 63	80 78 74 70 63 63 55	67 65 61 57 51 50 42	67 65 61 57 51 50 42	62 60 56 52 45 45	57 55 51 47 41 40 32	51 50 46 42 35 35 20

Source: William H. Sims, Profile of a Successful Marine, (Arlington, Va.: Center for Naval Analysis, 1977), pp. 20-23.

CHART D

Success Potential: Diploma Graduate
(Probability of Successfully Serving 24 Months)

Comb. Raw	at Scale (CC) (Percentile)	<u>1(95)</u>	ASVAB Me	ntal Gro	up (Percen IIIA(50)	tile Score IIIB(35)	) <u>IV(20)</u>
			Age 1	7-20 <sup>a</sup>			
21 19 17 15 13 11	98 90 74 54 36 22 13	.99ª .99ª .99 .98 .96 .95	.96 .94 .93 .92 .91 .89	.90 .89 .88 .86 .85 .84	.84 .83 .82 .81 .79 .78	.79 .77 .76 .75 .74 .72	.73 .71 .70 .69 .68 .67

Success potential = +.0038 (MG) +.0063 (CC) +.5210

<sup>&</sup>lt;sup>a</sup>Success potential constrained to \_\_\_.99.

Age 21 Or More									
21	98	. 93	. 87	.82	.76	.70	.65		
19	90 -	,92	.86	.80	.75	.69	.63		
17	74	.91	.85	.79	.74	<b>.6</b> 8	.62		
15	54	.89	. 84	.7B	.72	.67	.61		
13	36	.88	.82	.77	.71	.65	.60		
11	2 <b>2</b>	.87	.81	.75	.70	.64	.55		
9	13	.86	.80	.74	.68	.63	.57		

Success potential = +.0038 (MG) +.0063 (CC) +.4381

Success Potential: Nongraduate (Probability of Successfully Serving 24 Months)

Combat Scale (CC) ASVAB Mental Group (Percentile Score) Raw (Percentile) I(95) II(80) II(65) IIIA(50) IIIB(35) IV(20)								
		۸۵۵	17_20					
		Age	17-20					
21 98 19 90 17 74 15 54 13 36 11 22 9 13	.83 .82 .81 .79 .78 .77	.77 .76 .75 .74 .72 .71	.71 .69 .68 .67 .65	.66 .65 .62 .61 .60	.60 .59 .58 .57 .55 .53	.55 .53 .52 .51 .50 .48		
Success potentia	11 = +.0038	(MG) +	.0063 (CC	3384 + (3	ŀ			
	<u>!</u>	Age 21	Or More					
21 98 19 90 17 74 15 54 13 36 11 22 9 13		.65	.63 .62 .61 .60 .58 .57	.58 .57 .55 .54 .53 .51	.52 .51 .50 .48 .47 .46	.46 .45 .44 .43 .41 .40		
Success potentia	1 = +.0038	(MG) +	.0063 (CC	;) + .255	5			

Source: Warren T. Matthews, Quality of Marines: Pre Enlistment Screening Based on Predicted Performance, (Arlington, Va.: Centerfor Naval Analysis, Unpublished), pp. 26-29.

BIBLIOGRAPHY

### BIBLIOGRAPHY

### 1. Books

- Baynes, J.C.M. The Soldier in Modern Society, London, Eyre Melhuem Ltd., 1972.
- Binkin, Martin and Jeffery Record, Where Does the Marine Corps Go From Here?, Washington: The Brookings Institution, 1976.
- Gerhardt, James M., The Draft and Public Policy, Columbus, Ohio State University Press, 1971.
- Janowity, Morris, The US Forces and the Zero Draft, London, The International Institute for Strategic Studies, February 1973.
- Kline, J. H., Susan Farrell and Evan Clague, The All Volunteer Army: An Analysis of Demand and Supply, New York, Praeger Publishers, Inc.,
- Marmion, Harry A. The Case Against A Volunteer Army, Chicago, Quadrangle Books, 1971.
- Walt, Lewis W., America Faces Defeat, Woodbridge, Apollo Books, 1972.

## 2. Government Documents

- "An Analysis of The Gates' Commission Report," <u>Congressional Record</u>, April 28, 1970, pp. H3630-3666.
- , Commandant of the Marine Corps' Letter to Commanding Generals, MCRDs San Diego, California and Parris Island, South Carolina.

  Quality Recruiting, Washington: Headquarters, U.S. Marine Corps, October 12, 1977.
- , Commandant of the Marine Corps' Letter to Commanders, <u>Screening of NCO For Drill Instructor and Recruiting Duty</u>, Washington, Headquarters, U.S. Marine Corps, 30 December 1976.
- Gilman, Harry J., "Supply of First Term Military Enlistees," in <u>Studies</u>
  Prepared for The President's Commission On An All Volunteer Force,
  Washington: Government Printing Office, 1970.
- Kantor, Jeffery E. and Nancy Quinn, <u>Comparison of Performance and Career Progression of High School Graduates and Non-Graduates in the Air Force.</u> Lackland Air Force Base, Texas: Air Force Human Resources Laboratory, 1975.

The same of the sa

- Katz, Irwin, A Study of Some Conditions Affecting Productivity and Cohestveness in Culturally Heterogeneous Groups, Washington: Office of Naval Research Department of the Navy, 1968.
- . Marine Corps Order P1100.74, Marine Corps Personnel Procurement Manual, Washington, Headquarters, U.S. Marine Corps, January 1977.
- Force. Report of The President's Commission On An All Volunteer Armed U.S. Government Printing Office, Washington, February 1970.
- Rumsfeld, Donald H., <u>Annual Defense Department Report FY 78</u>, Washington, U.S. Government Printing Office, January 1977.
- Schlesinger, James R., Annual Defense Department Report FY 76 and FY 7T, Washington, D.C., U.S. Government Printing Office, February 1975.
- U.S. Congress, House. Committee On Armed Services, Subcommittee On Military Personnel. Marine Corps' Recruit Training and Recruiting Programs, Hearing, 94th Congress, 2nd Sess. September 29, 1976, Washington: Government Printing Office, 1976.

## 3. Periodicals and articles

- "American's Ready for a National Service Program," The Gallup Opinion Index. February 1977, pp. 15-21.
- Backman, Jerall G., "The All-Volunteer Force," <u>Psychology Today</u>, October 1972, p. 113.
- Ball, W. R., "Brookings Defense Study," Marine Corps Gazette, March 1976, pp. 7-9.
- "Big Switch: Military Finding Favor With New Generation," U.S. News and World Report, 3 May 1967, pp. 35-36.
- Bliven, Bruce, Jr., "A Reporter At Large, All Volunteer Armed Forces," New Yorker, November 1975, p. 24.
- Blum, Albert A., "Comparative Recruiting System," Military Review, March 1971, p. 10.
- Brehm, William K., "A Special Status Report: All Volunteer Force," Commanders' Digest, February 28, 1974, pp. 5-8.
- Brelen, William K., "Two Years With The All Volunteer Force," Commanders' Digest, April 1975, pp. 2-6.
- , "Confidence in The Military," Gallup Opinion Index, April 1977
- "Corps' High Standards Will Continue," Marine Corps Gazette, December 1976, p. 2.

- "Criticism of Defense Budget Declines Amid Perceptions of Growing Soviet Military Power," The Gallup Opinion Index, April 1976, pp. 19-21.
- Cushman, Robert E., Jr., "Walking Tall Statement of General Cushman to Senate Armed Services Committee on Marine Corps Posture," <u>Marine</u> <u>Corps Gazette</u>, April 1975, pp. 18-28.
- Duggan, P. T., "The All Volunteer Force and Its Impact On The Marine Corps," Marine Corps Gazette, June 1970, pp. 20-24.
- Finnerman, John G., "Recruiting, The Challenge of The All Volunteer Force," Commanders' Digest, April 28, 1977, pp. 1-12.
- Flynn, John F., "Finding Good Marines," Marine Corps Gazette, June 1975, pp. 42-43.
- "For Marines--New Quality Training," <u>Commanders' Digest</u>, July 7, 1977, pp. 8-9.
- Gardner, Judy and Mercer Cross, "Pannel Seeks Improved Combat Readiness," Congressional Quarterly, 16 April 1977, pp. 719-723.
- Gilfillan, Nilliam III, and J. R. Brown, Jr., "Recruiting An All-Volunteer Force," Marine Corps Gazette, November 1977, pp. 81-84.
- Hoiberg, Anne and Newell H. Berry, "There's No Doubt About It, A Diploma Goes A Long Way For Combat Efficiency," Marine Corps Gazette, September 1977, pp. 57-61.
- Humphrey, D. L., "Recruiting, A New Prospective," Marine Corps Gazette, June 1976, p. 21.
- Jaskilka, Samuel, "Quality and Leadership," Marine Corps Gazette, January 1975, pp. 14-17.
- Levitan, Sar A. and Karen C. Alderman, "The Military As An Employer: Past Performance and Future Prospects," Monthly Labor Review, November 1977, pp. 19-23.
- , "Manpower for The Military Draft or Volunteer," A Special Report, Washington, Association of the U.S. Army.
- Middleton, Drew, "The Volunteer Army In Review," Atlantic Monthly, December 1977, pp. 6-13.
- McKee, S. K., II, "Error of the AUF," Marine Corps Gazette, August 1975, p. 51.
- "Our Armed Forces Ready Or Not?" U.S. News and World Report, October 10, 1977, pp. 35-42.
- , "Pentagon's Inside Size Up of Military Power," <u>U.S. News and World Report</u>, January 17, 1977, pp. 20-23.

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- , "President Carter at the Pentagon: The Complete Transcript,"
  Armed Forces Journal, April 1977, pp. 18-23.
- , "Quo Vadis, Marine?", Officer Review, November 1977, pp. 1-3.
- "Recruiters Offer A Victnam Alternative More and More Recruiters,"
  New York Times, April 18, 1971, p. 61, c.1.
- Simmons, E. H., "The Marines: Now And In The Future," <u>United States Naval</u>
  <u>Institute Proceedings</u>, May 1975, pp. 102-117.
- "Sizing Up A Job In The Military," Changing Times, July 1976, pp. 29-32.
- Sorensen, Neal G., "Implications of a Volunteer Force," <u>Air University</u>
  <u>Review</u>, March-April 1971, pp. 47-52.
- Towell, Pat, "After 4 Years: Concern Over Volunteer Army," Congressional Quarterly, 26 March 1977, pp. 528-535.
- Trainor, Bernard E., "The Personnel Campaign Issue Is No Longer In Doubt," Marine Corps Gazette, January 1978, pp. 22-32.
- , "United States Congress Budget Office: Planning U.S. General Purpose Tours," Overview, January 1977, p. 51.
- "A Volunteer Army," New York Times, January 16, 1970, p. 46, c.2.
- Wilson, L. H., "Challenging and Tough, A Report On Recruiting," <u>Marine Corps Gazette</u>, August 1976, p. 2.
- Wilson, Louis H., "Commandant of the Marine Corps Reports to Congress:

  'We Are Ready Spirit Is High'," Marine Corps Gazette, April 1977,

  pp. 18-30.
- Wilson, L. H., "The Third Hundred Years," Marine Corps Gazette, November 1975, pp. 16-24.

## 4. Unpublished material

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Blanton, H. L., "Influencing Marine Corps Recruit Quality Through Recruiter Incentives," Unpublished Research Paper, The Naval War College, 1975.

With the Commence of the control of

Matthew, Warren T., Quality of Marines: Pre-Enlistment Screening Based On Predicted Performance, Unpublished Paper, Arlington, Center for Naval Research, 1977.

### 5. Other sources

- Canter, Ralph R., "Organization, Effectiveness and Military Personnel Attrition: DOD Management, Policy, Research Issues, and Some Military Service Alternatives," First Term Enlisted Attrition Volume I: Papers ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Coleman, James S., The Evaluation of Equality of Educational Opportunity.
  Santa Nonica: Rand Corporation, 1968.
- , Collected Papers Prepared Under Work Unit CAREER, Washington: George Washington University, 1969.
- Cook, A. A. and J. P. White, <u>Estimating The Quality of Air Force Recruits</u>, Santa Monica: Rand Corporation, 1972.
- Cooper, Richard V. L., <u>Military Manpower and the All Volunteer Force</u>, Santa Monica: Rand Corporation, September 1977.
- Cooper, Richard V. L. and Bernard Rosther, Military Manpower In A Changing Environment, Santa Monica: Rand Corporation, 1974.
- Cooper, Richard V. L., The Social Cost of Maintaining A Military Labor Force, Santa Monica, Calif.,: Rand Corporation, 1975.
- Dempsey, Jack R., Jonathan C. Fast, and Wayne S. Sillman, "A Method to Simultaneously Reduce Involuntary Discharges and Increase the Available Manpower Pool," First Term Enlisted Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Folk, Craig and Nikki King, "The Gatekeepers: First Term Enlisted Attrition Policies and Practices," First Term Enlistment Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Gottlieb, David, "Attrition: The Absorption and Integration of Newcomers," ed. H. Mallace Sinaiko, First Term Enlistment Attrition Volume I:

  Papers, Washington: Smithsonian Institution, 1977.
- Greenberg, Marshall G. and Gerald McConeghy, "Exploratory Development Research of U.S. Marine Corps Personnel, Phase I Factors Affecting Attrition," First Term Enlistment Attrition Volume I: Papers, ed. H. Wallace Sinalko, Washington: Smithsonian Institution, 1977.
- Grissmer, D. W. and others, <u>An Evaluation of Army Manpower Accession Program</u>, McLean: General Research Corporation, 1974.
- Guinn, Nancy, "USAF Attrition Trends and Identification of High Risk Personnel," First Term Enlistment Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Gunderson, E. K., Eric and Anne Hoiberg, "Personnel Effectiveness and Premature Attrition in The 311 Volunteer Navy," First Term Enlisted Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.

- Haber, Sheldon E. Factors Influencing Trainability in the Marine Corps. Washington: The George Washington University, 1975.
- Huck, D. F. and K. D. Medlaw. An Evaluation of the Effectiveness of U.S. Army Enlistment Bonuses. McLean, Va.: General Research Corporation, 1976.
- Huck, Daniel and Kenneth Midland. "A Model to Analyze The Cost Impact of First Term Attrition in the Navy and Marine Corps," First Term Enlistment Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Hulin, Charles L. "Individual Organizational and Environmental Influences on Turnover," First Term Enlisted Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Jaquetta, David L. and Gary R. Nelson. The Implications of Manpower Supply and Productivity for the Pay and Composition of the Military:

  An Optimization Model. Santa Monica: Rand Corporation, 1974.
- Klitgaard, Robert E. <u>Going Beyond the Man in Educational Evaluation</u>. Santa Monica: Rand Corporation, March 1974.
- Kohen, Andres I. "Job Changing Behavior of Young Men in the Civilian Labor Market," First Term Enlistment Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Lederer, D. A., Jr. Personnel in the 1970's, Santa Monica: Rand Corporation, 1968.
- Lockman, Robert T. and John T. Warner. "Predicting Attrition: A Test of Alternative Approaches," <u>First Term Enlisted Attrition Volume I: Papers</u>, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Martin, A. J. "Trends in DoD First Term Attrition," First Term Enlistment Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Matthews, Warren T. "Quality of Marines: Test Scores, Personal Data, and Performance," First Term Enlisted Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Mobley, William H., Herbert H. and John E. Lofan. "A Longitudinal Study of Enlisted Personnel Attrition in the U.S. Marine Corps: Preliminary Recruit Training Results," First Term Enlisted Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Moskos, Charles C., Jr. "It's A New Ball Game: Changing Expectations of Military Service," First Term Enlisted Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Myers, Stephen G. and Hugo C. George. "An Analysis of the Chronic Offender Problem Within the Armed Forces," Masters Degree Thesis, United States Naval Postgraduate School, 1965.

- O'Neil, Dave M., "Determinants of Labor Turnover Costs in The Military,"
  Studies Prepared for The President's Commission on An All Volunteer
  Force, Washington: Government Printing Office, 1970.
- Pascal, Anthony II. and John Pincus, Rand's Education and Human Resources Program, 1973, Santa Monica: Rand Corporation, 1973.
- Pincus, John, <u>Education</u>, <u>Schooling</u>, and <u>Civilization</u>, Santa Monica: Rand Corporation, 1973.
- Pincus, John, Policy Studies At Rand: Education and Human Resources.
  Santa Monica: Rand Corporation, 1971.
- Plag, John A., Jerry M. Goffman and James D. Phelam, <u>The Adaptation of Naval Enlistees Scoring in Mental Group IV on the Armed Forces Qualification Test.</u> San Diego: Navy Medical Neuropsychiatric Research Unit, 1970.
- Porter, Lyman W. and Richard M. Steers, "Organizational Commitment and Personnel Attrition," First Term Enlisted Attrition Volume I: Papers ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Reaume, David M. and Walter Y. Oi. "Educational Attainment of Military and Civilian Labor Forces," <u>Studies Prepared For The President's Commission On An All-Volunteer Armed Force</u>. Washington: Government Printing Office, 1970.
- Sarason, Irwin G., "Psychological Coping Skills and the Reduction of Attrition Among Military Personnel," First Term Enlisted Attrition Volume I: Papers, ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Segal, David R. and Jerald G. Backman, "Post High School Drop-Outs," First Term Enlisted Attrition Volume I: Papers. ed. H. Wallace Sinaiko, Washington: Smithsonian Institution, 1977.
- Sims, William H., Profile of A Successful Marine, Washington: Center of Naval Analysis, 1977.
- Sullivan, John A., "Qualitative Requirements of The Armed Forces,"

  Studies Prepared For The President's Commission On An All Volunteer

  Armed Force, Washington: Government Printing Office, 1970.
- Verna, Steve and Thomas L. Mufflin, <u>An Analysis of Marine Corps School</u>
  <u>Assignment and Performance</u>, Arlington: Center for Naval Analysis,
  1977.
- Vineburg, Robert, Thomas G. Sticht, Elaine H. Taylor, and John S. Caylor, Effect of Apptitude (AFQT), Job Experience, and Literacy On The Job Performance, Alexandria, Va.: Human Resources Research Organization, February 1971.
- Washburn, Paul V., C. Harold Stone, Dale Yoder, and William T. Farrell,
  The Use of Worker Characteristics in Marine Corps Classification and
  Assignment, Los Angeles, California State University, May 1976.